	STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCES  DIVISION OF OIL, GAS AND MINING										AMENDED RE	FORM 3	
		APPL	ICATION FOR PER	MIT TO DRIL	.L				1. WELL I	NAME and NUI	MBER Jte Tribal 09-0	18	
2. TYPE OF		NEWWELL	\		pennen /	٦			3. FIELD	OR WILDCAT			
							5. UNIT o	r COMMUNITI		EMENT N	AME		
6. NAME OF	OPERATOR	Oil W	/ell Coalbed Me	ethane Well: NC	)				7. OPERA	ATOR PHONE	NTELOPE CREE	EK	
8. ADDRESS	OF OPERATOR		PETROGLYPH OPERA	ATING CO					9. OPERA	ATOR E-MAIL	208 685-7674	4	
	L LEASE NUMBER		oadway Ave, Ste 500,	Bosie, ID, 8370							west@pgei.co	m	
	INDIAN, OR STATE			EDERAL OWN	INDIAN (	) STATE	) FEE	- I	FEDER/	- T	400	АТЕ 🔵	FEE
13. NAME O	F SURFACE OWN	IER (if box 12 = 'fo	ee')						14. SURF	ACE OWNER	PHONE (if box	c 12 = 'fee'	)
15. ADDRES	SS OF SURFACE O	OWNER (if box 12	= 'fee')						16. SURF	ACE OWNER	E-MAIL (if bo	x 12 = 'fee'	')
17. INDIAN (if box 12 =	,	IBE NAME dian Tribe	MUI	LTIPLE FORMA	TIONS	PRODUCTION F	_	_	19. SLAN		ECTIONAL 🗍	HORIZO	ONTAL 🔵
20. LOCAT	ION OF WELL		FOOTA	GES	Q	TR-QTR	СТІ	ION	то	WNSHIP	RANGE		MERIDIAN
LOCATION	AT SURFACE		1823 FNL	773 FEL		SENE	9		5	5.0 S	3.0 W		U
Top of Up	permost Producin	ng Zone	1823 FNL	773 FEL		SEME	9		5	5.0 S	3.0 W		U
At Total D	epth		1823 FNL	773 FEL		SELIT	9		5	5.0 S	3.0 W		U
21. COUNT		CHESNE	22.	DISTANCE TO	NEAREST	EAS LINE (Fee	et)		23. NUME	BER OF ACRES	640	UNIT	
				DISTANCE TO pried For Drill	or Com	VELL IN SAME P pleted) 091	POOL		26. PROP	OSED DEPTH MD:	6078 TVD:	6078	
27. ELEVAT	ION - GROUND LE	EVEL	28.	BOND NUMBE	ND IMBER 29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICAE			ABLE					
		5038			LP4138153 43-8342								
Otalia a	Hala Ciaa	One in a size			Hole, Casing, and Cement Information  Weight Grade & Thread Max Mud Wt. Cement Sacks Yield					Wataba			
String	Hole Size	Casing Size	0 - 55	Weight 5.0	-	Inknown	IVI	10.0		Class G	Sacks 25	Yield 1.17	Weight 15.8
Surf	12.25	8.625	0 - 495	24.0		-55 ST&C	_	10.0		Class G	227	1.17	15.8
Prod	7.875	5.5	0 - 6078	15.5		-55 LT&C	_	10.0		Class G	484	1.92	12.5
										Class G	302	1.46	13.4
		<u>'</u>	*		ATTACI	HMENTS			'			<u> </u>	
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES													
WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<b>I</b> COMPL	LETE DRIL	LING PL	_AN				
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					)	FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DR					LED)	<b>Т</b> ОРОБ	RAPHICA	L MAP					
NAME Ed Trotter TITLE Agent					ent	1		PHONE	E 435 789	9-4120			
SIGNATURE DATE 07					02/2012			EMAIL	edtrotter@	@easilink.com			
1	er assigned 1351525000	00		APPROVA	APPROVAL BARGALL								
						P	ermit M	Janager					

#### CONFIDENTIAL

# EIGHT POINT DRILLING PLAN PETROGLYPH OPERATING COMPANY, INC UTE TRIBAL 09-08 SE NE, SEC 9, T5S, R3W DUCHESNE COUNTY, UTAH

#### 1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Formation		Subsea	MD
Rig KB=15' above GGL		6053	0
Surface Formation = <b>Uinta</b>			
Uinta		6038	15
Green River		4574	1479
Trona		3152	2901
Mahogany Shale		3050	3003
"B" Marker	_ =	1929	4123
"X" Marker	200	1438	4615
Douglas Creek Marker	in the second	1287	4766
"B" Limestone	Waterflood Unit Interval	888	5164
Base Castle Peak Limestone	<b>&gt;</b> 5	346	5706
BSCARB		48	0
Wasatch		-322	NDE
Rig TD		-17	6078

# 2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

<b>Substance</b>	<b>Formation</b>	<b>SUBSEA</b>	MD
Base of moderate	ely saline		
ground water*	not present	6060	0
Oil/Gas	Douglas Creek	1287	4766
Oil/Gas	Castle Peak	346	5706

Any water encountered during drilling shall be sampled, analyzed and reported to the BLM Vernal office using State of Utah DOGM Form 7 *Report of Water Encountered during Drilling*. The following analyses shall be performed on any water encountered:

Flow rate (or blowtest)	Temperature	рН	TDS
Dissolved Iron	Dissolved Magnesium	Dissolved Bicarb.	Dissolved Sulfate
Dissolved Calcium	Dissolved Sodium	Dissolved Carbonate	Dissolved Chloride

All depths through the "Base of moderately saline ground water"\*, along with any water encountered below that depth which is less than 10,000 TDS, shall be protected by the surface casing or by lifting the cement of the production casing into the surface casing.

<sup>\*</sup>Base of Moderately Saline Groundwater from Howells, Longson and Hunt, 1981, Utah State Technical Publication 92: The Base of the Moderately Saline Water in the Uinta Basin, Utah



API Well Number: 43013515250000

#### **CONFIDENTIAL**

# EIGHT POINT DRILLING PLAN PETROGLYPH OPERATING COMPANY, INC UTE TRIBAL 09-08 SE NE, SEC 9, T5S, R3W DUCHESNE COUNTY, UTAH

#### 3. PROPOSED CASING PROGRAM:

String	Hole	Casing	Top - MD	Bottom - MD	Weight lb/ft	Grade	Thread
Conductor	20"	14"	surface	54.5'	steel	Cond'r	none
Surface	12-1/4"	8-5/8"	surface	494.5'	24	J-55	STC
Production	7-7/8"	5-1/2"	surface	6078'	15.5	J-55	LTC

String	Hole	Casing	Collapse	Burst	Tens	6
Surface	12-1/4"	8-5/8"	1,370 psi	2,950 psi	244,00	0
Production	7-7/8"	5-1/2"	4,040 psi	4,810 psi	248,00	J lb

- All casing will be new or inspected.
- The surface and production strings shall have unininum of one (1) centralizer on each of the bottom three (3) joints.
- The production string shall have a minimum of one (1) centralizer for every three (3) joints from TD to the top of the "B" marker at 4.23 MD.

#### 4. PROPOSED CEMENTING PROGRAM:

String	Bottom	Cement Description	Sacks Vol (ft³)	Excess	Weight (ppg)	Yield (ft³/sk)
Conductor	0 54.5	Construction Grade Cement	Sufficien	nt volumes	to grout Co	onductor
Surface	0	Class G +2% CaCl2	227	30%	15.8	1.17
Carraco	494.5	+0.25 lb/sk Cello Flake	265	0070	10.0	
Production	0	EXPANDACEM (Class G +additives)	484	30%	12.5	1.92
Lead	4123	+ 1 lb/sk Granulite TR1/4 (LCM)	929	30 /6	12.5	1.92
Production	4123	EXPANDACEM (Class G +additives)	302	30%	13.4	1.46
Tail	6078	+ 1 lb/sk Granulite TR¼ (LCM)	440	JU /0	13.4	1.40

- The 8-5/8" surface casing shall be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.
- The 5-1/2" production casing shall be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, a remedial surface cementing operation shall be performed only if necessary to lift cement above the Surface Casing Shoe at 480'MD.



#### **CONFIDENTIAL**

# EIGHT POINT DRILLING PLAN PETROGLYPH OPERATING COMPANY, INC UTE TRIBAL 09-08 SE NE, SEC 9, T5S, R3W DUCHESNE COUNTY, UTAH

#### 5. MINIMUM PRESSURE CONTROL AND SAFETY EQUIPMENT:

- An 8", 2000 PSI, Double Ram BOPE with Hydraulic Closing Unit shall be used.
- A 2000 PSI Working Pressure Annular shall be used.
- The flowline shall have a minimum diameter of 10".
- Auxiliary equipment shall be a Kelly Cock, Bit Float, and a TIW valve with drill pipe threads.
- Spark arrestors shall be equipped on all engine exhausts within 100 feet of the wellbore.
- See attached 2,000 psi BOP schematic diagram.

#### **BOPE TESTING PROCEDURE:**

• The BOPE shall be tested by a professional tester to conform to prishore Order #2.

#### 6. MUD PROGRAM:

#### A. SURFACE HOLE

- The surface hole will be drilled with an air/mist system from 0' to 494.5'. All cutting shall be directed to pit.
- A trailer-mounted compressor with a capacity of 2000 CFM will be used. Compressor will have a safety shut-oit valve located less than 15 feet from the driller's controls of the rig.
- The rat and mouse holes will be drilled with the air rig after surface casing is cemented.
- The 140 barrel water truck used with the deduster will be the source of kill fluid in the highly unlikely event of pressure being encountered during drilling of the surface hole.
- Operator requests the following variances from Onshore Order 2 part E during drilling of the surface hole. Operator will use air drilling techniques only on surface hole:
  - Operator requests a variance to regulations requiring the blooie line discharge to be 100' from the wellbore. Due to reduced location size, the blooie line discharge will be approximately 75' from the wellbore and securely anchored.
  - Operator requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. A mister shall be on the end of the blooie line.
  - Operator requests a variance to regulations requiring compressors be located in the opposite direction from the blooie line; a minimum of 100' from the wellbore. Due to the reduced location size, the compressors shall be located as close as is reasonable to the opposite direction from the blooie line and 75' from the wellbore.
  - Operator requests a variance to regulations requiring a BOPE on the hole when drilling the surface hole. An air bowl shall be utilized on the diverter system in place of a BOPE.



#### **CONFIDENTIAL**

# EIGHT POINT DRILLING PLAN PETROGLYPH OPERATING COMPANY, INC UTE TRIBAL 09-08 SE NE, SEC 9, T5S, R3W DUCHESNE COUNTY, UTAH

#### B. PRODUCTION HOLE

- The production hole shall be drilled with a freshwater polymer system from 494.5' to 6078'. LSND mud if conditions warrant.
- Clay inhibition and hole stability shall be achieved with a Diammonium Phosphate (DAP) additive or similar source of clay-stabilizing ions. Anticipated mud weight is 8.3-8.4 lbs/gal.
- All cuttings and circulating medium shall be directed into the reserve oit. Total Dissolved Solids (TDS) are anticipated to be less than 3000 PPM.
- Sufficient mud inventory will be maintained on location in either tanks or the reserve pit during the drilling of the production hole to handle any adverse conditions that may arise.
- If necessary to control formation flads or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite. Enough material shall be maintained on location to above for the mudweight to be raised to 10.5 lbs/gal should need arise.
- During drilling operations pit levels and flow from the well shall be monitored by instrumentation to include at least: a pit volume totalizer (PVT), a stroke counter, and a mud-flow indicator.
- A mud-gas separator shall be available on location.

#### C. HAZARDOUS MATERIALS AND POLLUTANTS

- Chromate additives **shall NOT** be used in the mud system on Indian lands without prior BLM approval to ensure adequate protection of freshwater aquifers.
- Chemicals subject to reporting under SARA Title III in an amounts equal to or greater than 10,000 pounds annually **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities shall NOT be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Hazardous substances specifically listed by the EPA as a hazardous waste, as defined in 40 CFR 261 (D), or any substances that through their use would lead to the generation of a hazardous waste, **shall NOT** be used in association with the drilling, testing, or completion of this well.



API Well Number: 43013515250000

#### **CONFIDENTIAL**

# EIGHT POINT DRILLING PLAN PETROGLYPH OPERATING COMPANY, INC UTE TRIBAL 09-08 SE NE, SEC 9, T5S, R3W DUCHESNE COUNTY, UTAH

#### 7. EVALUATION PROGRAM:

Logs: Triple Combo TD to base of surface casing (AIT, DSN, CDL)

Base of surface casing to surface (GR)

Cores: None planned

DST: None planned

Testing: Operator plans no testing until the completion phase of the well

#### 8. ANTICIPATED ABNORMAL PRESSURE OR TEMPER TURE:

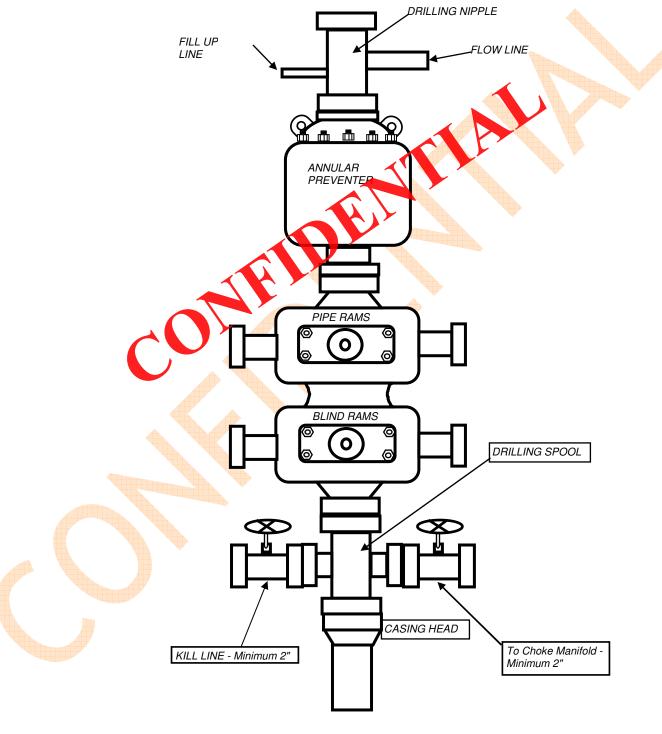
- Operator anticipates Bottom Hole Temperatures below 150°F, the maximum temperature for DAP drilling fluids.
- No H<sub>2</sub>S has been encountered or known to exist from previous drilling in the area at this depth.
- Maximum pressure for hydro arbon bearing zones at native conditions in this area is approximately 1519.5 PSI (0.25 PSI/ft gradient).
- This well is NOT in the vicinity of active injection wells. Nearby active injection can cause pressures up to a 0.433 PSI/ft gradient.



#### **CONFIDENTIAL**

EIGHT POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 09-08
SE NE, SEC 9, T5S, R3W
DUCHESNE COUNTY, UTAH

#### TYPICAL 2,000 p.s.i. BLOWOUT PREVENTER

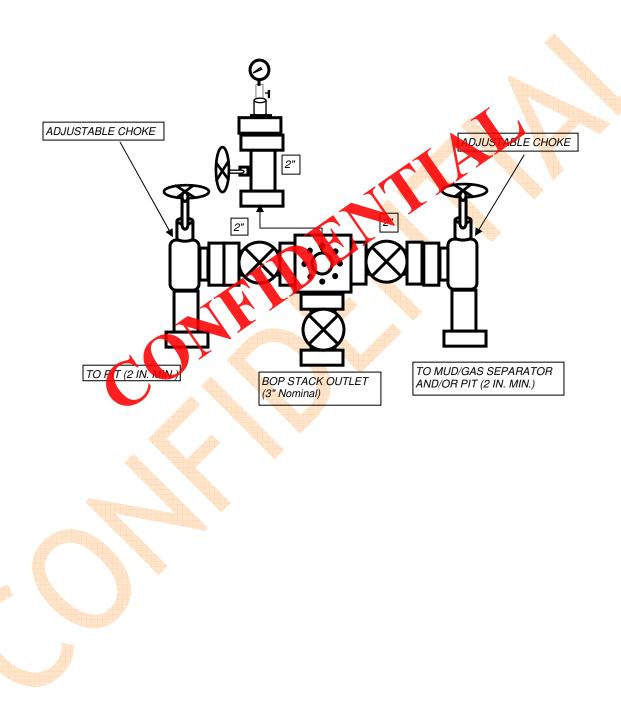


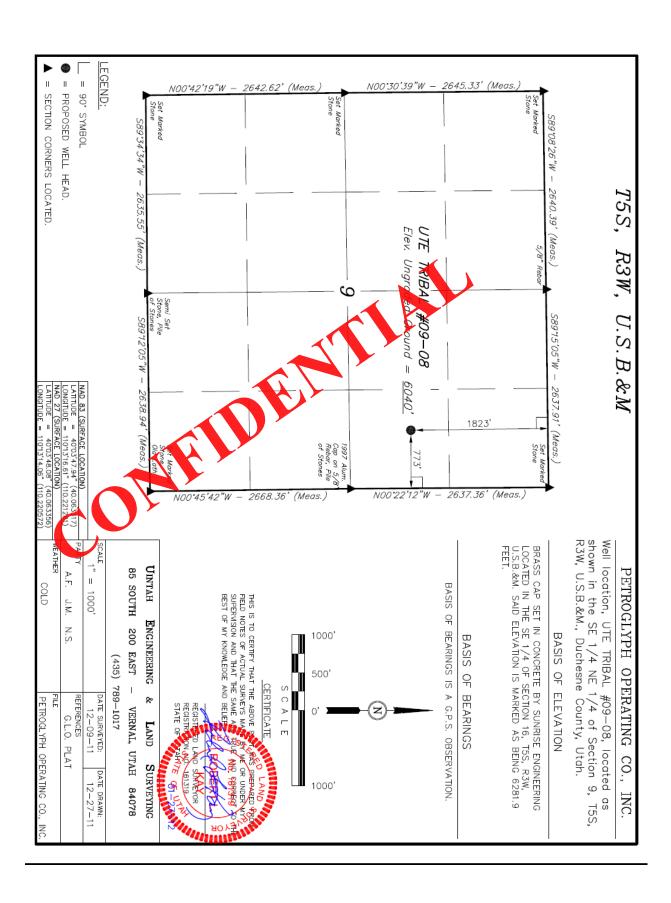


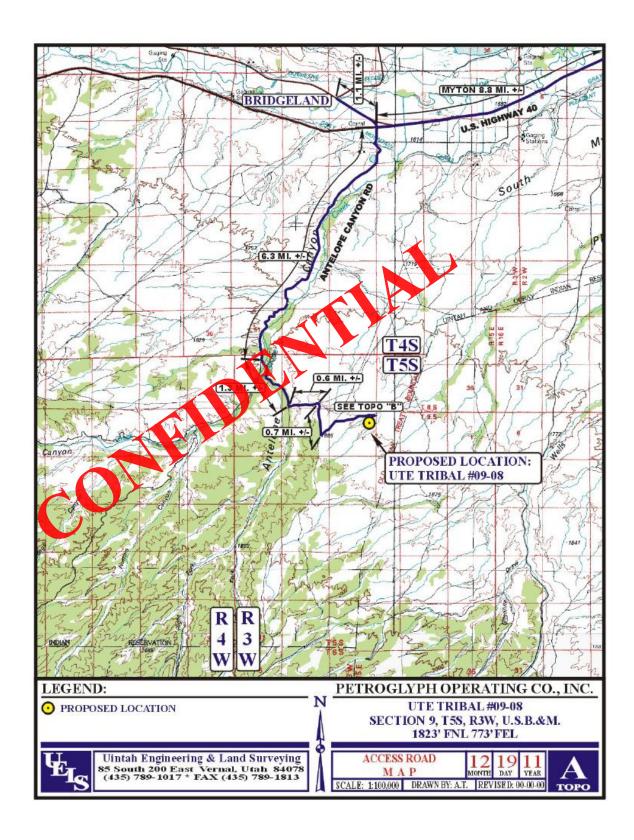
API Well Number: 43013515250000

### **CONFIDENTIAL**

EIGHT POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 09-08
SE NE, SEC 9, T5S, R3W
DUCHESNE COUNTY, UTAH
TYPICAL 2,000 p.s.i. CHOKE MANIFOLD







#### **Certification**

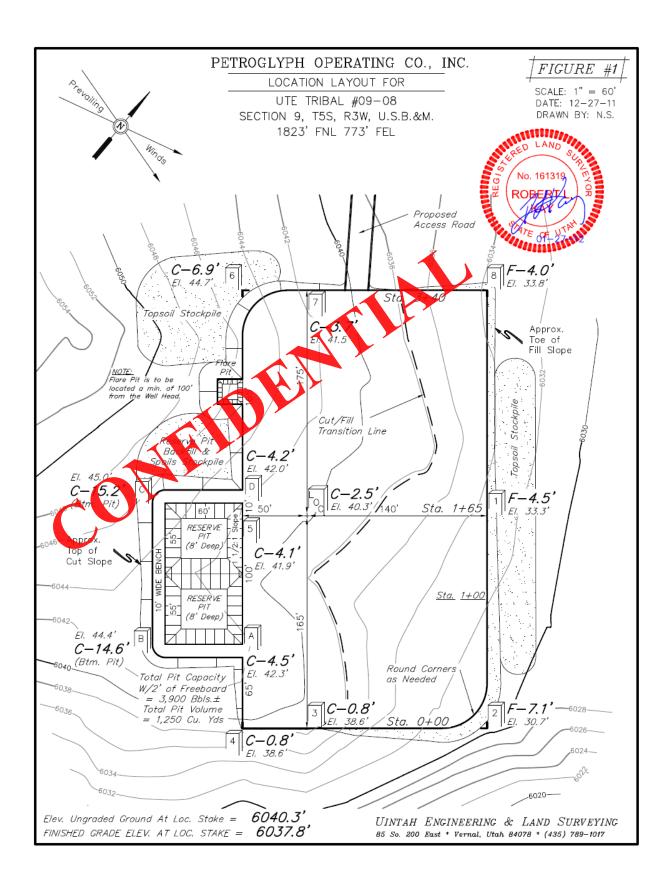
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

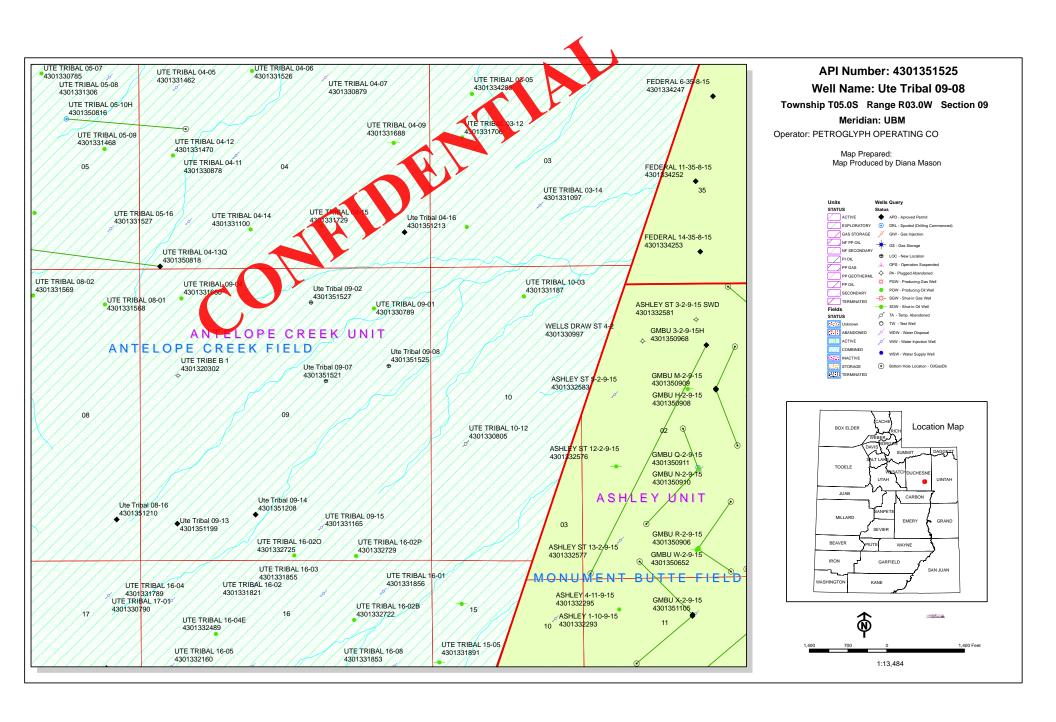
Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the UTE TRIBAL 09-08 Well, located in the SE/NE of Section 9, T5S, R3W, Duchesne County, Utah; Lease #14-20-H62-3508; and is responsible under the terms and conditions of the lease for the operators conducted upon the leased lands. Bond Coverage is provided under Bond #LP4138153.

Date

Ed Trotter, as Agent for Petroglyph Operating Co., Inc.

Document1 1





## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 7/2/2012 API NO. ASSIGNED: 43013515250000 WELL NAME: Ute Tribal 09-08 **OPERATOR: PETROGLYPH OPERATING CO (N3800)** PHONE NUMBER: 435 789-4120 **CONTACT:** Ed Trotter PROPOSED LOCATION: SENE 09 050S 030W Permit Tech Review: **SURFACE: 1823 FNL 0773 FEL Engineering Review: BOTTOM:** 1823 FNL 0773 FEL Geology Review: **COUNTY: DUCHESNE LATITUDE:** 40.06329 LONGITUDE: -110.22139 UTM SURF EASTINGS: 566401.00 NORTHINGS: 4435072.00 FIELD NAME: ANTELOPE CREEK LEASE TYPE: 2 - Indian LEASE NUMBER: 14-20-H62-3508 PRODUCING FORMATION(S): CASTLE PEAK SURFACE OWNER: 2 - Indian **COALBED METHANE: NO RECEIVED AND/OR REVIEWED:** LOCATION AND SITING: ✓ PLAT R649-2-3. Unit: ANTELOPE CREEK Bond: INDIAN - LP4138153 Potash R649-3-2. General Oil Shale 190-5 R649-3-3. Exception Oil Shale 190-3 Oil Shale 190-13 **Drilling Unit** Board Cause No: Cause 214-2 Water Permit: 43-8342 Effective Date: 6/9/2000 **RDCC Review:** Siting: Suspends General Siting Fee Surface Agreement

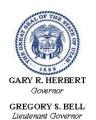
R649-3-11. Directional Drill

Comments: Presite Completed

**Intent to Commingle** 

**Commingling Approved** 

Stipulations: 4 - Federal Approval - dmason



#### State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

#### Permit To Drill

\*\*\*\*\*\*

Well Name: Ute Tribal 09-08 API Well Number: 43013515250000 Lease Number: 14-20-H62-3508

Surface Owner: INDIAN Approval Date: 7/2/2012

#### Issued to:

PETROGLYPH OPERATING CO, 960 Broadway Ave, Ste 500, Bosie, ID 83703

#### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 214-2. The expected producing formation or pool is the CASTLE PEAK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available) OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

#### Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
  - Requests to Change Plans (Form 9) due prior to implementation
  - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
  - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas Sundry Number: 33188 API Well Number: 43013515250000

	OTATE OF LITAL		FORM 9
	STATE OF UTAH DEPARTMENT OF NATURAL RESOUR	CES	
	DIVISION OF OIL, GAS, AND MI	NING	5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3508
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute In
	posals to drill new wells, significantly reenter plugged wells, or to drill horizon n for such proposals.		7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: UTE TRIBAL 09-08
2. NAME OF OPERATOR: PETROGLYPH OPERATING C	00		9. API NUMBER: 43013515250000
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste	500 , Bosie, ID, 83703	PHONE NUMBER: 208 685-7685 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1823 FNL 0773 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 9 Township: 05.0S Range: 03.0W Mer	idian: U	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
,	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:			
12/13/2012	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
DRILLING REPORT	L TUBING REPAIR	☐ VENT OR FLARE ☐	☐ WATER DISPOSAL ☐
Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
I .	COMPLETED OPERATIONS. Clearly show Dud on 12/13/2012. We set	40' of 16" Conductor.	depths, volumes, etc.  Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY December 19, 2012
Rodrigo Jurado	435 722-5302	Regulatory & Compliance S	Spc
SIGNATURE N/A		<b>DATE</b> 12/19/2012	

## BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Craig's /Air rig
Submitted By Rodrigo Jurado Phone Number 435-722-5302
Well Name/Number <u>Ute Tribal 09-08</u> Qtr/Qtr <u>SENE</u> Section <u>09</u> Township <u>5S</u> Range <u>3W</u> Lease Serial Number <u>14-20-H62-3508</u> API Number <u>43-013-51525</u>
<u>Spud Notice</u> – Spud is the initial spudding of the well, not drilling out below a casing string.
Date/Time <u>12/13/12</u> <u>08:00</u> AM ⊠ PM □
Casing – Please report time casing run starts, not cementing times.  Surface Casing Intermediate Casing Production Casing Liner Other
Date/Time AM  PM
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point BOPE test at intermediate casing point 30 day BOPE test Other  RECEIVED DEC 1 3 2012 DIV. OF OIL, GAS & MINING
Date/Time AM
Remarks We plan to spud this well at the time referenced. We

plan to run 40' of 16" Conductor. (Sent 12/12/12 @ 7:00 A.M.)

CONFIDENTIAL

## BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Craig's /Air rig
Submitted By Rodrigo Jurado Phone Number 435-722-5302
Well Name/Number <u>Ute Tribal 09-08</u>
Qtr/Qtr <u>SENE</u> Section <u>09</u> Township <u>5S</u> Range <u>3W</u>
Lease Serial Number <u>14-20-H62-3508</u>
API Number43-013-51525
<u>Spud Notice</u> – Spud is the initial spudding of the well, not drilling out below a casing string.
Date/Time AM PM
Casing – Please report time casing run starts, not cementing times.  Surface Casing Intermediate Casing Production Casing Liner Other
Date/Time 12/14/12 06:00 AM PM
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point BOPE test at intermediate casing point 30 day BOPE test Other  RECEIVED DEC 1 3 2012 DIV. OF OIL, GAS & MININ
Date/Time AM

Remarks We plan to run 500'+/- of 8-5/8" J-55 Casing at the time indicated. (Sent 12/13/12 @ 9:45 A.M.)

PECENED

**UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** 

APPLICATION FOR PERMIT TO DRILL OR REENTER A

AUG 2 2 2012

FORM APPROVED OMB No. 1004-0136 Expires July 31, 2010

5. Lease Serial No. 1420H623508

6. If Indian, Allottee or Tribe Name

	AND THE STATE OF STAT	
1a. Type of Work: ☑ DRILL ☐ REENTER	CONFIDENTIAL	7. If Unit or CA Agreement, Name and No. 1420H624650
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Ot  2. Name of Operator Contact:	her Single Zone Multiple Zone	8. Lease Name and Well No. UTE TRIBAL 09-08
PETROGLYPH OPERATING CO., IN Gail: edtrotte	r@easilink.com	9. API Well No. 43-013-51575
P.O. BOX 607 ROOSEVELT, UT 84066	3b. Phone No. (include area code) Ph: 435-789-4120 Fx: 435-789-1420	10. Field and Pool, or Exploratory ANTELOPE CREEK
4. Location of Well (Report location clearly and in accord At surface SENE 1823FNL 773FEL At proposed prod. zone SENE 1823FNL 773FEL		11. Sec., T., R., M., or Blk. and Survey or Area Sec 9 T5S R3W Mer UBM
14. Distance in miles and direction from nearest town or post 19.36 MILES SOUTHWEST OF MYTON, UT	office*	12. County or Parish 13. State DUCHESNE UT
<ol> <li>Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)</li> <li>773'</li> </ol>	16. No. of Acres in Lease 640.00	17. Spacing Unit dedicated to this well
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1091	19. Proposed Depth 6078 MD	20. BLM/BIA Bond No. on file LPM4138335
21. Elevations (Show whether DF, KB, RT, GL, etc. 6038 GL	22. Approximate date work will start 10/15/2012	23. Estimated duration 45 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor. 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) LESTER FARNSWORTH Ph: 435-722-2531	Date 08/22/2012
Title DISTRICT MANAGER		
Approved by (Signature) ACTING On Swen	Name (Printed/Typed) Johnny P. Pawen	Date 11-29-12
Title Ascistant Field Manager Lands & Mineral Resources	VERNAL FIELD OFFICE	1.10/12

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #146941 verified by the BLM Well Information System For PETROGLYPH OPERATING CO., INC., sent to the Committed to AFMSS for processing by LESLIE ROBINSON OF THE PROPERTY OF THE PR

NOTICE OF APPROVAL



DIV. OF OIL. GAS & MINING

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* IZPRHZIJOA



#### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE**

**VERNAL, UT 84078** 

(435) 781-4400



#### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No: API No:

Petroglyph Operating CO., Inc.

Ute Tribal 09-08

43-013-51525

Location:

**SENE, Sec. 9, T5S, R3W** 

Lease No: 14-20-H62-3508 Agreement:

**Antelope Creek** 

**OFFICE NUMBER:** 

(435) 781-4400

OFFICE FAX NUMBER:

(435) 781-3420

#### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### **NOTIFICATION REQUIREMENTS**

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 6 Well: Ute Tribal 09-08 11/27/2012

## SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### General Conditions of Approval:

- A <u>30'</u> foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- All Production Equipment will be painted Covert Green to help blend into the surrounding vegetation and meet VRM type objectives.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipelines.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- Petroglyph Operating Company will implement a "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined
  to the area examined and approved, and to the existing roadways and/or evaluated access
  routes.
- The personnel from the Ute Tribe Energy & Minerals Department will be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

Page 3 of 6 Well: Ute Tribal 09-08 11/27/2012

#### DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

- Gamma Ray Log shall be run from Total Depth to Surface.
- CBL will be run from TD to TOC.
- Cement for the surface casing will be circulated to the surface.
- Cement for the long-string shall be circulated 200' above surface casing shoe.

#### Variance Granted

Variance for air-drilling approved per APD

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the
  daily drilling report. Components shall be operated and tested as required by Onshore Oil &
  Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be
  performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be
  reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.

Page 4 of 6 Well: Ute Tribal 09-08 11/27/2012

The operator must report all shows of water or water-bearing sands to the BLM. If flowing water
is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM
Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum
   Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 5 of 6 Well: Ute Tribal 09-08 11/27/2012

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at <a href="https://www.ONRR.gov">www.ONRR.gov</a>.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written
  communication and must be received in this office by not later than the fifth business day
  following the date on which the well is placed on production. The notification shall provide, as a
  minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

Page 6 of 6 Well: Ute Tribal 09-08 11/27/2012

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM. Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
  and all future meter proving schedules. A copy of the meter calibration reports shall be
  submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API
  standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
  measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
  to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs
  first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
  adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
  sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior
  approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
  days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
  before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Print Form

# CONFIDENTIAL

### **BLM - Vernal Field Office - Notification Form**

Ope	rator Petroglyph Operating Co. Rig Name/# Azte	ec 673
Subr	mitted By Geno Rowland Phone Number 970	)-361-3271
Well	Name/Number Ute Tribal 09-08	
Qtr/	Qtr <u>SE/NE</u> Section 9 Township <u>5S</u>	Range <u>3W</u>
	se Serial Number <u>14-20-H62-3508</u>	
API	Number <u>43-013-51525</u>	
Snu	d Notice – Spud is the initial spudding of the w	ell not drilling
	below a casing string.	on, not arming
Out i	below a casing string.	
	Date/Time AM [	РМ
<u>Casi</u> time	ng – Please report time casing run starts, not o	cementing
	Surface Casing	
	Intermediate Casing	
	Production Casing	
	Liner	
	Other	
	Date/Time AM [	РМ
BOP	F	RECEIVED
	Initial BOPE test at surface casing point	DEC 1 8 2012
H	BOPE test at intermediate casing point	DEC   0 2012
	30 day BOPE test	DIV. OF OIL, GAS & MINING
	Other	
	Date/Time 12/17/2012 09:00 AM ✓	РМ 🗀
	•	
Rem	narks Plan to test our 11" x 3Kpsi Townsend BOP sta	ck from
	unuai sunace point.	<del></del>

#### STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM					
Operator:	Petroglyph Operating Company	Operator Account Number:	N 3800		
Address:	P.O. Box 607	·			
	city Roosevelt				
	state UT zip 84066	Phone Number:	(435) 722-2531		

Wall 1

API Number	Well I	Vame	QQ	Sec	Twp	Rng	County
4301351525	Ute Tribal 09-08		SENE	9	58	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		ity Assignment Iffective Date
В	99999	9393	1	2/13/20 <sup>-</sup>	12	12/1	912012
omments:				ALIPE	N In a limit	181	

Please add to existing Ute Tribal 09-01 Tank Battery.

API Number	Well	Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	S	pud Da	le be	Entit Ef	ly Assignment fective Date
omments:						<u> </u>	

Well 3

API Number	Well I	Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	s	pud Da	•		ity Assignment Effective Date
omments:							

ACTION CODES	A	CT	10	N	CO	DES	:
--------------	---	----	----	---	----	-----	---

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity

  D Re-assign well from one existing entity to a new entity
- Other (Explain in 'comments' section)

DEC 19 2012

Titla	Date
Regulatory Compliance Spc	12/19/2012
Signature	
Name (Please Print)	
11 A. A. A. A. A.	
Rodrigo Jurado	

## BLM - Vernal Field Office - Notification Form

Ope	rator Petroglyph Operating	Rig Name/# <u>A</u> :	ztec # 673	·
Sub	mitted By <u>Kenny Gray</u>	_ Phone Number 9	70-361-32	71
Wel	l Name/Number <u>Ute Tribal 0</u>	9-08		
Qtr/	Qtr <u>SE/NE</u> Section <u>09</u>	_ Township <u>5S</u>	_ Range 3	<u>W</u>
Lea:	se Serial Number <u>14-20-H62</u>	-3508		A second second
API	Number <u>43-013-51525</u>			
Spu	d Notice – Spud is the initia	al spudding of the	well, not	drilling
	below a casing string.			<b>3</b>
	Date/Time	AM [	] PM [	]
time	ing – Please report time ca	sing run starts, no	t cementi	ng
     	Surface Casing Intermediate Casing Production Casing Liner Other			
	Date/Time <u>12/20/2012</u>	11:00 AM	] PM 🔽	]
BOP	PE Initial BOPE test at surface BOPE test at intermediate 30 day BOPE test Other		Di	RECEIVED DEC 2 0 2012 V. OF OIL, GAS & MINING
	Date/Time	AM [	PM	]
Rem	narks <u>6489' 5 1/2" csg</u>	And the second s		nun mananan

Sundry Number: 33892 API Well Number: 43013515250000 FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE	<del></del>	5.LEASE DESIGNATION AND SERIAL NUMBER:
	DIVISION OF OIL, GAS, AND MIN	NING	14-20-H62-3508
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute In
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK		
1. TYPE OF WELL			8. WELL NAME and NUMBER:
Oil Well	UTE TRIBAL 09-08		
2. NAME OF OPERATOR: PETROGLYPH OPERATING O	<b>9. API NUMBER:</b> 43013515250000		
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste	500 , Bosie, ID, 83703	PHONE NUMBER: 208 685-7685 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE:			COUNTY: DUCHESNE
1823 FNL 0773 FEL			DOCHESINE
QTR/QTR, SECTION, TOWNSI Qtr/Qtr: SENE Section: 0	HP, RANGE, MERIDIAN: 9 Township: 05.0S Range: 03.0W Meri	dian: U	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
1/30/2013			
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	□ DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	L PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12 DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show		denths volumes etc
l .	/30/2013, depending on equ		Accepted by the
	rating intends to perforate a	•	<b>Utah Division of</b>
	, 4519-26, 4528-38, 4557-		Oil, Gas and Mining
· · · · · · · · · · · · · · · · · · ·	-66, 5098-5100, 5115-26,		Date: January 16, 2013
l .	4. All perforations will be m	<u> </u>	
	g 22.7 gram charges, 0.42" E		By: 15/ 1 Just
i i	will frac using Delta 140 15 olumes and amounts will be	· ·	
20/40 mesh sand, v	oldines and amounts will be	reported at a later date	•
NAME (DI EASE DOINT)	DUONE NUME	BER TITLE	
NAME (PLEASE PRINT) Rodrigo Jurado	<b>PHONE NUME</b> 435 722-5302	Regulatory & Compliance S	рс
SIGNATURE		DATE	
N/A		1/16/2013	

Sundry Number: 34729 API Well Number: 43013515250000

			FORM 9			
	STATE OF UTAH		I OKW 3			
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3508			
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute In			
	oposals to drill new wells, significantly or reenter plugged wells, or to drill horizor n for such proposals.		7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK			
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: UTE TRIBAL 09-08			
2. NAME OF OPERATOR: PETROGLYPH OPERATING O	9. API NUMBER: 43013515250000					
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste	500 , Boise, ID, 83703	PHONE NUMBER: 208 685-7685 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1823 FNL 0773 FEL			COUNTY: DUCHESNE			
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 09 Township: 05.0S Range: 03.0W Merid	ian: U	STATE: UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA						
TYPE OF SUBMISSION		TYPE OF ACTION				
	ACIDIZE	ALTER CASING	CASING REPAIR			
☐ NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
✓ SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION			
Date of Work Completion: 2/9/2013						
	OPERATOR CHANGE	PLUG AND ABANDON	LI PLUG BACK			
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
_	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL			
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
	WILDCAT WELL DETERMINATION	OTHER	OTHER:			
I .	COMPLETED OPERATIONS. Clearly show a of first production for this we		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 21, 2013			
NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBI 435 722-5302	ER TITLE Regulatory & Compliance S	Spc			
SIGNATURE		DATE	·			
N/A		2/14/2013				

RECEIVED: Feb. 14, 2013

Sundry Number: 36894 API Well Number: 43013515250000

	STATE OF UTAH			FORM 9
	DEPARTMENT OF NATURAL RESOUF DIVISION OF OIL, GAS, AND M	-	3	5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3508
	RY NOTICES AND REPORTS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute In
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	oposals to drill new wells, significantl reenter plugged wells, or to drill horiz n for such proposals.	y deep ontal l	en existing wells below aterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
1. TYPE OF WELL Oil Well				8. WELL NAME and NUMBER: UTE TRIBAL 09-08
2. NAME OF OPERATOR: PETROGLYPH OPERATING O	9. API NUMBER: 43013515250000			
3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste	500 , Boise, ID, 83703		NE NUMBER: 3 685-7685 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1823 FNL 0773 FEL	COUNTY: DUCHESNE			
QTR/QTR, SECTION, TOWNSI Qtr/Qtr: SENE Section: 0	U	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE N	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	ACIDIZE		ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start:	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	1	RACTURE TREAT	☐ NEW CONSTRUCTION
2/15/2013	OPERATOR CHANGE		PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME		RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR		/ENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF		SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION		OTHER	OTHER:
42 DESCRIPE PROPOSED OR				<u>'</u>
12. DESCRIBE PROPUSED OR	COMPLETED OPERATIONS. Clearly show Please see the attached f	-	rainent details including dates, d	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 01, 2013
NAME (PLEASE PRINT) Rodrigo Jurado	<b>PHONE NUM</b> 435 722-5302	BER	TITLE Regulatory & Compliance S	pc
SIGNATURE			DATE	
l N/A			4/22/2013	

Sundry Number: 36894 API Well Number: 43013515250000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

F	O	R	M	9

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3508						
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  Ute Indian Tribe						
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugge drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME: 14-20-H62-4650						
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: Ute Tribal 09-08						
2. NAME OF OPERATOR: Petroglyph Operating Company Inc.	9. API NUMBER: 4301351525						
3. ADDRESS OF OPERATOR: P.O. Box 607 Roosevelt STATE UT ZIP 84066 PHONE NUMBE (435) 722	i '						
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1823' FNL, 773' FEL	county: Duchesne						
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 9 5S 3W U	STATE: UTAH						
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTIC							
TYPE OF SUBMISSION TYPE OF ACT							
NOTICE OF INTENT (Submit in Duplicate)  ACIDIZE  DEEPEN  ALTER CASING  FRACTURE TREAT	REPERFORATE CURRENT FORMATION  SIDETRACK TO REPAIR WELL						
(Submit in Duplicate)	TEMPORARILY ABANDON						
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR						
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE						
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK	WATER DISPOSAL						
(Submit Original Form Only)  CHANGE WELL STATUS  PRODUCTION (START/RESU	IME) WATER SHUT-OFF						
Date of work completion:  COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SI	TE OTHER:						
2/15/2013 CONVERT WELL TYPE RECOMPLETE - DIFFERENT	FORMATION						
DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  On 1/30/2013 Petroglyph Operating ran GR/CBL and found ETOC @ 156'. On 1/31/2013 we perforated and fracture treated the following: 5768-74, 5685-91, 5282-86, 5270-78, 5115-26, 5098-5100, 5058-66, 496-69, 4844-28, 4576-87, 4557-68, 4528-38, 4519-26 & 4455-59. Using Halliburton 8K Composite plugs for isolation, we then frac'd the following intervals: 5685-5774: 434 Bbls fluid cont 30,200#s sand, 5270-5286: 418 Bbls fluid cont 116,900#s sand, 4558-5100: 600 Bbls fluid cont 41,100#s sand, 4844-4969: 397 Bbls fluid cont 24,900#s sand, 4455-4587: 996 Bbls fluid cont 108,920#s sand.  We frac'd using Delta 140 15# gelled fluid containing 20/40 Mesh Sand. We perforated using Titan 3-1/8" perf guns containing 22.7 gram charges, 0.42" EHD, 23.54" TTP @ 4 SPF @ 120" phased. All plugs were drilled out and cleaned out to 6445', PBTD. The well was swabbed until a good oil cut was seen. After running tubing and a pump, the well was put to pump on 2/15/2013.							
NAME (PLEASE PRINT) Rodrigo Jurado TITLE Regulat	ory Compliance Specialist						
SIGNATURE DATE 4-19-	/3						

(This space for State use only)

STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCES  DIVISION OF OIL, GAS AND MINING												(hiç	ghlight	REPO	s)		ORM 8	
		E	DIVISI	ON OI	F OIL,	GAS	AND N	/ININ	G				- 1		signatic H62-3		SERIAL NUM	BER:
WELL COMPLETION OR RECOMPLETION REPORT AND LOG													allotte dian T		RIBE NAME			
1a. TYPE OF WELL:  OIL GAS WELL DRY OTHER											- 1		AGREEN		ME			
b. TYPE OF WORK:  NEW HORIZ. DEEP- RE- DIFF. WELL ATS: EN ENTRY RESVR. OTHER													IE and NU					
2. NAME OF OPERATOR: Petroglyph Operating Company, Inc.												PI NUMBI 43013	ER: 51525	5				
3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066 (435) 722-2531												POOL, C		CAT				
4. LOCATION OF W AT SURFACE:			3' FEL								·		1				ISHIP, RANC	
AT TOP PRODUC	CING INTERVA	AL REPOR	RTED BEI	Low: 2	024' FI	VL 5	81' FE	L					56	ENE	9	5S	3W (	j
AT TOTAL DEPT	н: 2056'	FNL :	578' F	EL										OUNTY Ouches	sne		13. STATE	UTAH
14. DATE SPUDDED 12/13/2012		DATE T	.D. REAC /2012	HED:	16. DATE 2/9/2		ETED:	Α	BANDONI	ED 🗌	READY TO	PRODUC	E 🗸		vations 052	(DF, RK	3, RT, GL):	
18. TOTAL DEPTH:	MD 6,50		1	19. PLUG	BACK T.D.:		6,445 6.432	***************************************	20. IF N	MULTIPLE CO	OMPLETION	S, HOW I	MANY? *		TH BRIDO	GE MI		
22. TYPE ELECTRIC			ICAL LO	GS RUN (S	Submit copy					23.								
ACTR, Bore	hole Volu	ıme P	lot, SE	DDSN,	Ceme	nt Bo	nd Log	)		WAS DST	L CORED? RUN? NAL SURVE	Y?	NO NO NO	<u> </u>	YES  YES  YES  YES	(Sul	omit analysis) omit report) omit copy)	
24. CASING AND LI	NER RECORD	(Report	all string:	set in we	ell)													
HOLE SIZE	SIZE/GRAI	DE	WEIGHT	(#/ft.)	TOP (M	ID)	воттом	M (MD)			CEMENT NO. OF S		SLURRY VOLUME (BBL) CEME		CEMEN	IT TOP *	* AMOUN	T PULLED
20	16 J	-55	75	5	0		54	4									Con	ductor
12.25	8.625 J	-55	24	ļ	0		51	15			G	300	61			0		
7.875	5.5 J	1-55	15.	.5	0		6,4	90		G 855		855	261		156			
25. TUBING RECOR	LD.						L				<u></u>				<u> </u>			
SIZE	DEPTH SE	ET (MD)	PACK	ER SET (A	MD)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)	T	SIZE	0	EPTH SE	T (MD)	PACKER	SET (MD)
2.875	6,2	69																
26. PRODUCING IN	TERVALS									27. PERFO	RATION REG	CORD						
FORMATION	NAME	TOP	(MD)	вотто	M (MD)	TOP		BOTTO	M (TVD)	INTERVA	L (Top/Bot -	MD)	SIZE	NO. HOL	.ES	PERFC	RATION STA	TUS
(A) Green Riv	er	4,4	155	5,7	74	4,4	44	5,7	62	4,455	5,	774	0.42	384	Оре	n 🔽	Squeezed	
(B)											······································				Оре	in 🗌	Squeezed	
(C)															Оре	ın	Squeezed	
(D)											······································				Оре	ın 🗌	Squeezed	
28. ACID, FRACTUR	RE, TREATMEN	NT, CEME	NT SQUE	EZE, ETC	<b>:</b> .													
DEPTHI	NTERVAL								AMC	DUNT AND T	YPE OF MA	TERIAL						
4,455'-5,774	1		2,84	5 Bbls	of Delt	a 140	0 15# (	gelled	fluid c	ontainin	g 322,0	20#'s	of 20/4	40 Me	sh Sa	nd		
29. ENCLOSED ATT	ACHMENTS:															30. WE	L STATUS:	
r3	RICAL/MECHAI Y NOTICE FOR			CEMENT	VERIFICAT	ION		GEOLOGIC	C REPORT	-	DST REPOR		DIRECT		URVEY		POW	/

(CONTINUED ON BACK)

(5/2000)

# 31. INITIAL PRODUCTION Used for Fuel 33. SUMMARY OF POROUS ZONES (Include Aquifers):

#### INTERVAL A (As shown in item #26)

DATE FIRST PRO	ODUCED:	TEST DATE:	_	1 1				GAS - MCF:	WATER - BBL:	PROD. METHOD:	
2/9/2013		3/12/2013	3	2	24		80	102	83	Rod Pump	
CHOKE SIZE: 32/64	TBG. PRESS.	CSG. PRESS.	API GRAVITY 39.40	BTU – GAS 1	GAS/OIL RATIO 1,275	24 HR PRODUCTION RATES: →	OIL BBL: <b>80</b>	GAS - MCF: 102	WATER – BBL: 83	INTERVAL STATUS: Open	
				INT	ERVAL B (As sho	wn in item #26)					
DATE FIRST PRO	ODUCED:	TEST DATE:		HOURS TESTED	HOURS TESTED:		OIL - BBL:	GAS MCF:	WATER - BBL:	PROD. METHOD:	
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:	
				INT	ERVAL C (As show	wn in item #26)	<u> </u>				
DATE FIRST PRO	ODUCED:	TEST DATE:		HOURS TESTED	):	TEST PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:	
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:	
				INTI	ERVAL D (As show	wn in item #26)					
DATE FIRST PRO	ODUCED:	TEST DATE:		HOURS TESTED	HOURS TESTED:		OIL BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:	
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS MCF:	WATER - BBL:	INTERVAL STATUS:	

#### 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth
				Mahogany	3,010
				Garden Gulch	3,736
				B Marker	4,129
				X Marker	4,624
				Y Marker	4,660
				Douglas Creek	4,771
				B Lime	5,168
				Castle Peak	5,710
				Basal Carbonate	6,104
				Wasatch	6,377

<sup>35.</sup> ADDITIONAL REMARKS (Include plugging procedure)

All Frac and Perf info is condensed. Please see NOI and Subsequent Frac Sundry for a detailed record.

6. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.							
NAME (PLEASE PRINT) ROdrigo Jurado	Regulatory Compliance Specialist						
SIGNATURE	DATE 5/2/2013						
tion where the same state of t							

This report must be submitted within 30 days of

- completing or plugging a new well
- · drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth

34. FORMATION (Log) MARKERS:

• drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

Utah Division of Oil, Gas and Mining Send to: 1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

801-359-3940

(5/2000)

RECEIVED: May. 06, 2013

<sup>\*</sup> ITEM 20: Show the number of completions if production is measured separately from two or more formations.

<sup>\*\*</sup> ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

(5/2000)

FORM 7

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

	RI	EPORT O	F WATER ENCOUN	TERE	DUI	RING DRILLING
Well name and	number: Ute	Tribal 09-08		<del></del>		_
API number: 4	301351525					
Well Location:	QQ <u>SENE</u> Sec	tion 9	Township <u>5S</u> Range	3W	Count	y Duchesne
Well operator:	Petroglyph Op	erating Cor	mpany, Inc.	-		
Address:	P.O. Box 607					
	city Roosevelt		state UT zip 84066		Phor	ne: (435) 722-2531
Drilling contract	tor: ProPetro S	Services				
Address:	1422 East 150					
	city Vernal		state UT zip 84078		Phor	ne: (435) 789-1735
Water encounte		ditional pag				***************************************
Г			VOLUME	, <del></del>	<u> </u>	QUALITY
<b> -</b> -	DEP <sup>*</sup>	TO	(FLOW RATE OR I	HEAD)		(FRESH OR SALTY)
	0	508	0			No Water Encountered
_						
				·····		
_		<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>				
L						
Formation tops:	4		2			3
(Top to Bottom)	4					
	7					
	10 _					·
f an analysis ha	as been made o		encountered, please atta			
•			-		-	
I hereby certify tha	nt this report is tru	ie and compl	ete to the best of my knowled	ge.		
NAME (PLEASE PRINT)	Rodrigo Jurao	do		TITLE _	Regula	tory Compliance Specialist
SIGNATURE	We had			DATE	12/21/2	2012

Measured Depth FT	.00	528.00	649.00	771.00	892.00	1017.00	1141.00	1265.00	1389.00	1513.00	1637.00	1761.00	1885.00	
Incl Angle Deg	.00	.97	.66	1.32	2.02	2.48	3.08	3.60	4.16	4.48	4.70	5.10	5.10	
Drift Direction Deg	.00	11.32	77.06	99.83	112.40	117.49	131.47	138.41	139.46	136.83	136.08	139.84	143.29	
True Vertical Depth	.00	527.97	648.96	770.95	891.89	1016.80	1140.65	1264.44	1388.16	1511.81	1635.41	1758.95	1882.46	
N-S FT	.00	4.38	5.54	5.46	4.41	2.32	-1.12	-6.24	-12.57	-19.52	-26.71	-34.58	-43.21	
E-W	.00	.88	1.76	3.83	7.17	11.61	16.48	21.56	27.07	33.31	40.15	47.22	54.07	
Vertical Section FT	00	-2.69	-2.98	-1.54	1.46	5.97	11.78	18.98	27.37	36.71	46.63	57.21	68.22	



Company: Petroglyph Rig Name: Aztec 673 **Location: Duchesne County** Lease/Well: Ute Tribal 09-08 Job Number: UT121034

G.L. or M.S.L.: MSL

Grid: True Declination: 11.19 State/Country: Utah / USA

File name: C:\WINSERVE\UT121034.SVY

Date/Time: 20-Dec-12 / 05:34

Curve Name: Ute Tribal 09-08\_Actual

# Payzone Directional

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 138.40

Rectangular Coordinates Referenced to Wellhead

Distance

Direction

Dogleg Severity Deg/100

CLOSURE

.00 4.47 5.81 6.67 8.42

.00 11.32 17.59

.00 .18 .76 .62

35.03 58.41

Vertical Section Referenced to Wellhead

Page 1

48.22 58.53 69.22

123.64 126.22 128.63

.18 .41 .25

11.84 16.52 22.45 29.85 38.61

78.69 93.90 106.14 114.91 120.37

.40 .73 .46 .30

	5734.00 5858.00 5982.00 6106.00	5113.00 5237.00 5362.00 5486.00 5610.00	4493.00 4617.00 4741.00 4865.00 4989.00	3872.00 3996.00 4121.00 4245.00 4369.00	3251.00 3375.00 3500.00 3624.00 3748.00	2630.00 2754.00 2879.00 3003.00 3127.00	2009.00 2133.00 2258.00 2382.00 2506.00	Measured Depth FT
	.88 .40 .31	1.32 .88 1.00 .35	3.47 3.10 2.81 1.71 1.27	4.13 3.78 4.17 4.09 3.91	4.97 4.57 5.36 5.01 4.43	4.57 4.88 5.23 4.68 5.54	4.70 5.10 5.10 5.05 4.53	Incl Angle Deg
	186.31 320.39 252.85 236.41	175.81 262.15 238.87 200.99 200.29	148.61 150.28 152.00 150.10 155.95	140.65 144.65 135.34 138.90 148.34	134.24 132.00 142.28 141.53 143.22	130.94 130.11 133.75 133.57 135.56	145.93 147.16 138.30 135.03 131.82	Drift Direction Deg
Ute Tribal 09	5722.12 5846.12 5970.12 6094.11	5101.18 5225.16 5350.15 5474.14 5598.13	4481.72 4605.52 4729.35 4853.25 4977.21	3862.20 3985.90 4110.60 4234.28 4357.98	3243.37 3366.94 3491.47 3614.96 3738.54	2624.75 2748.33 2872.85 2996.38 3119.89	2006.01 2129.56 2254.06 2377.58 2501.15	True Vertical Depth
Page -08_Actual File: C:\	-228.54 -229.15 -228.91 -229.38	-222.65 -224.21 -224.90 -225.82 -226.88	-201.12 -207.23 -212.83 -217.11 -219.97	-167.46 -174.25 -180.84 -187.38 -194.31	-128.28 -135.33 -143.28 -152.10 -160.18	-91.10 -97.74 -105.10 -112.49 -120.26	-51.84 -60.68 -69.50 -77.47 -84.60	PT PT
Page 2 Ute Tribal 09-08_Actual File: C:\WINSERVE\UT12103	201.20 200.82 200.22 199.34	205.75 204.91 203.03 201.96 201.56	194.55 198.16 201.25 203.60 205.08	168.40 173.59 179.17 185.25 190.37	134.76 142.28 149.55 156.46 162.70	95.17 102.93 111.12 118.86 126.72	60.21 66.05 72.76 80.28 87.79	E-W
121034.SVY	304.48 304.68 304.11 303.88	303.10 303.71 302.98 302.95 303.48	279.56 286.53 292.77 297.53 300.66	237.03 245.56 254.19 263.11 271.70	185.39 195.66 206.43 217.62 227.80	131.31 141.43 152.37 163.04 174.06	78.74 89.23 100.27 111.23 121.55	Vertical Section FT
	304.48 304.69 304.12 303.90	303.16 303.74 302.99 302.95 303.48	279.81 286.73 292.91 297.64 300.75	237.49 245.96 254.57 263.49 272.03	186.05 196.36 207.11 218.21 228.31	131.74 141.94 152.95 163.66 174.70	79.45 89.69 100.61 111.57 121.92	C L Distance FT
	138.64 138.77 138.83 139.01	137.26 137.57 137.93 138.19 138.38	135.95 136.28 136.60 136.84 137.01	134.84 135.11 135.27 135.23 135.33	133.59 133.57 133.77 134.19 134.55	133.75 133.52 133.41 133.42 133.50	130.73 132.57 133.69 133.98 133.94	LOSURE Direction
	.21 .96 .32 .27	.36 1.24 .32 .61	.36 .31 .24 .89 .37	.29 .36 .55	.47 .36 .95 .29	.06 .26 .38 .44	.37 .33 .63 .24	Dogleg Severity

6500.00	6354.00 6439.00	Measured Depth FT
.83	.79 .83	Incl Angle Deg
227.31	234.61 217.03 227.31	Drift Direction Deg
6488.08	6342.09 6427.08	True Vertical Depth
-232.91	-230.25 -231.43 -232.31	PT S
195.42	198.09 196.87 196.07	E-W
303.92	303.70 303.77 303.90	Vertical Section FT
304.03	303.73 303.84 303.99	CL( Distance FT
140.00	139.29 139.61 139.84	CLOSURE ce Direction Deg
.00		Dogleg Severity Deg/100

